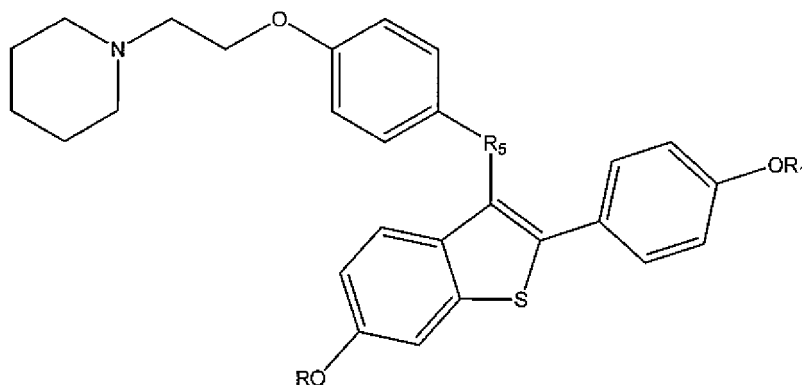


AMENDMENT TO THE CLAIMS

Please amend claims 12, 60, 75, and 87; and cancel claims 26, 28, 32, 34, 65, 66, 69, 70, 79, 80, 83 and 84 (claims 2-3, 13-14, 24, 27, 30, 33, and 35-56 having previously been canceled).

1. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



or a pharmaceutically acceptable salt thereof,

wherein R and R₁ are each independently selected from the group consisting of hydrogen, —COR₂, —COR₃, and R₄,

R₂ is selected from the group consisting of hydrogen, C1-C14 alkyl, C1-C3 chloroalkyl, C1-C3 fluoroalkyl, C5-C7 cycloalkyl, C1-C4 alkoxy, and phenyl,

R₃ is phenyl with at least one substitution selected from the group consisting of C1-C4 alkyl, C1-C4 alkoxy, hydroxy, nitro, chloro, fluoro, trichloromethyl, and trifluoromethyl,

R₄ is selected from the group consisting of C1-C4 alkyl, C5-C7 cycloalkyl, and benzyl, and

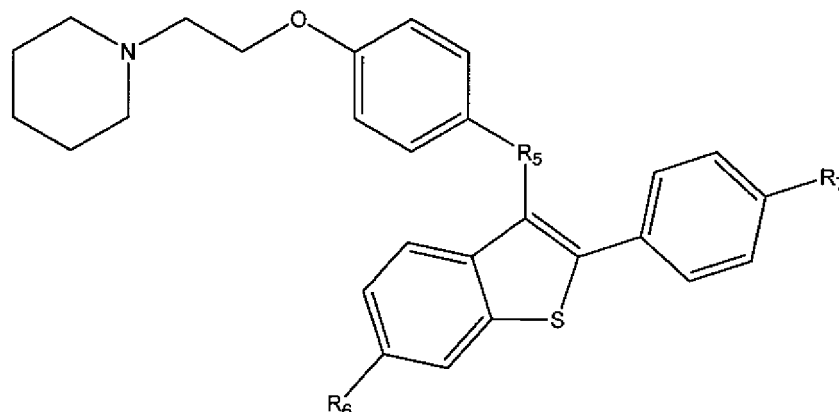
R₅ is selected from the group consisting of oxygen and —C=O, and

wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

Claims 2-3 (Canceled).

4. (Original) The method of claim 1, wherein the compound is administered in an effective amount of about 180 mg per day.
5. (Original) The method of claim 4, wherein the compound is administered in an effective amount of about 180 mg per day only after the mammal fails to respond to treatment with the compound at an amount of about 60 mg per day.
6. (Original) The method of claim 1, further comprising administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.
7. (Original) The method of claim 6, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.
8. (Original) The method of claim 1, wherein the compound is administered orally.
9. (Original) The method of claim 1, wherein R and R₁ are both hydrogen.
10. (Original) The method of claim 1, wherein R₅ is oxygen.
11. (Original) The method of claim 1, wherein R₅ is -C=O.

12. (Currently Amended) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a prodrug having the formula



or a pharmaceutically acceptable salt thereof,

wherein R₅ is selected from the group consisting of oxygen and --C=O ,

R₆ and R₇ are each independently selected from the group consisting of hydrogen, hydroxy and --OR_8 ,

R₈ is a hydroxy protecting group selected from the group consisting of ether, ester, C1-C4 alkyl, substituted C1-C4 alkoxy, unsubstituted C1-C4 alkoxy, substituted C1-C6 alkyl, unsubstituted C1-C6 alkyl, $\text{SO}_2\text{--(C4-C6 alkyl)}$, and --(CO)Ar , wherein Ar is a benzyl or a substituted phenyl, and

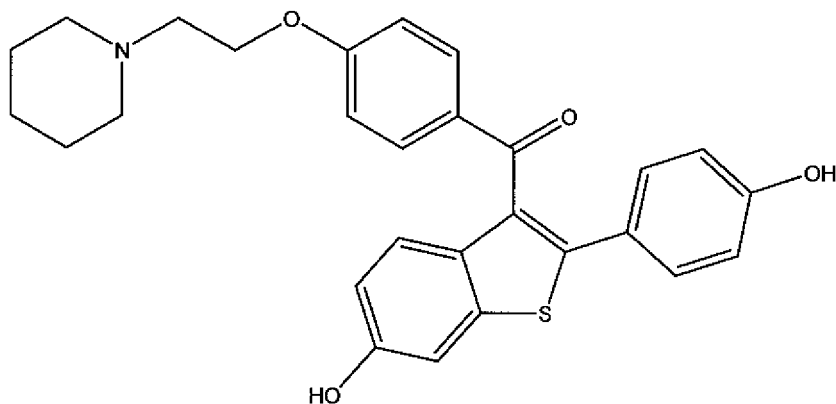
at least one of R₆ and R₇ is metabolically processed by the mammal after administration of the prodrug to convert the prodrug into a pharmaceutical compound effective in the treatment of androgen-independent prostate cancer, and

wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

Claims 13-14 (Canceled).

15. (Original) The method of claim 12, wherein the compound is administered in an effective amount of about 180 mg per day.
16. (Original) The method of claim 15, wherein the compound is administered in an effective amount of about 180 mg per day only after the mammal fails to respond to treatment with the compound at an amount of about 60 mg per day.
17. (Original) The method of claim 12, further comprising administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.
18. (Original) The method of claim 17, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.
19. (Original) The method of claim 12, wherein the compound is administered orally.
20. (Original) The method of claim 12, wherein R_6 and R_7 are both metabolically processed by the mammal after administration of the prodrug, such that, following the metabolic process, a first hydroxy group remains at the site occupied by R_6 prior to the metabolic process and a second hydroxy group remains at the site occupied by R_7 prior to the metabolic process.
21. (Original) The method of claim 12, wherein R_5 is oxygen.
22. (Original) The method of claim 12, wherein R_5 is $-C=O$.

23. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



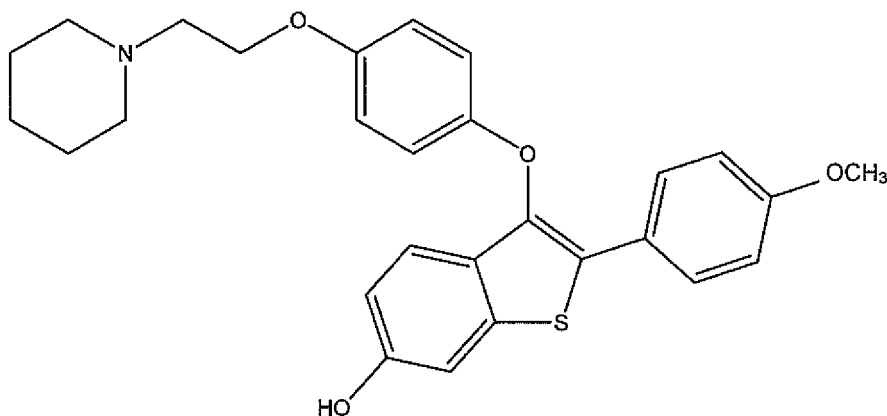
or pharmaceutically acceptable salts thereof, wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

Claims 24 (Canceled).

25. (Original) The method of claim 23, further comprising administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

Claims 26-28 (Canceled).

29. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



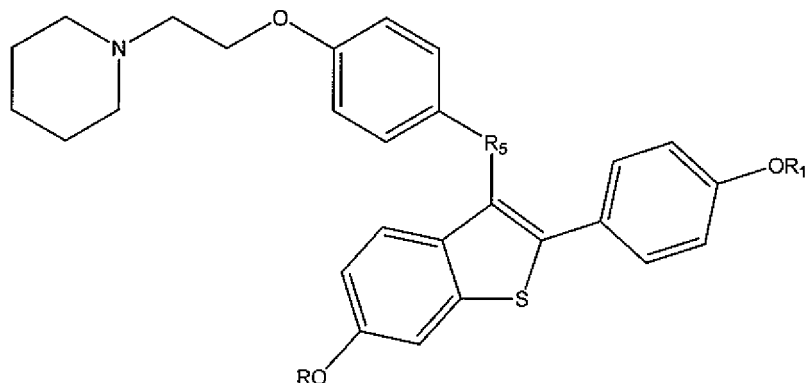
or pharmaceutically acceptable salts thereof, wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

Claim 30 (Canceled).

31. (Original) The method of claim 29, further comprising administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

Claim 32-56 (Canceled).

57. (Previously Presented) A method of stabilizing or reducing tumor mass of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



or a pharmaceutically acceptable salt thereof,

wherein R and R₁ are each independently selected from the group consisting of hydrogen, —COR₂, —COR₃, and R₄,

R₂ is selected from the group consisting of hydrogen, C1-C14 alkyl, C1-C3 chloroalkyl, C1-C3 fluoroalkyl, C5-C7 cycloalkyl, C1-C4 alkoxy, and phenyl,

R₃ is phenyl with at least one substitution selected from the group consisting of C1-C4 alkyl, C1-C4 alkoxy, hydroxy, nitro, chloro, fluoro, trichloromethyl, and trifluoromethyl,

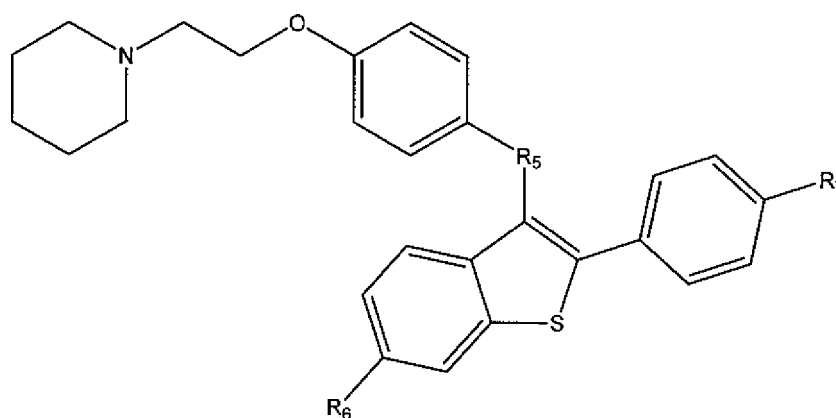
R₄ is selected from the group consisting of C1-C4 alkyl, C5-C7 cycloalkyl, and benzyl, and

R₅ is selected from the group consisting of oxygen and —C=O, and

wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

58. (Previously Presented) The method of claim 57, wherein R and R₁ are both hydrogen.
59. (Previously Presented) The method of claim 57, wherein R₅ is —C=O.

60. (Currently Amended) A method of stabilizing or reducing tumor mass of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a prodrug having the formula



or a pharmaceutically acceptable salt thereof,

wherein R_5 is selected from the group consisting of oxygen and $-C=O$,

R_6 and R_7 are each independently selected from the group consisting of hydrogen, hydroxy and $-OR_8$,

R_8 is a hydroxy protecting group selected from the group consisting of ether, ester, C1-C4 alkyl, substituted C1-C4 alkoxy, unsubstituted C1-C4 alkoxy, substituted C1-C6 alkyl, unsubstituted C1-C6 alkyl, SO_2 -(C4-C6 alkyl), and $-(CO)Ar$, wherein Ar is a benzyl or a substituted phenyl, and

at least one of R_6 and R_7 is metabolically processed by the mammal after administration of the prodrug to convert the prodrug into a pharmaceutical compound effective in the treatment of androgen-independent prostate cancer, and

wherein the compound is administered in an effective amount of about 180 mg to about 300 mg per day.

61. (Previously Presented) The method of claim 60, wherein R_6 and R_7 are both metabolically processed by the mammal after administration of the prodrug, such

that, following the metabolic process, a first hydroxy group remains at the site occupied by R₆ prior to the metabolic process and a second hydroxy group remains at the site occupied by R₇ prior to the metabolic process.

62. (Previously Presented) The method of claim 60, wherein R₅ is --C=O .
63. (Previously Presented) The method of claim 23, wherein the compound is administered in an effective amount of about 180 mg per day.
64. (Previously Presented) The method of claim 25, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

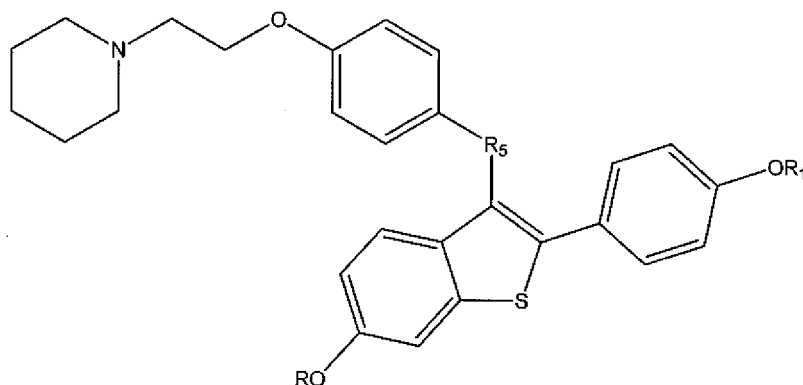
Claims 65-66 (Canceled).

67. (Previously Presented) The method of claim 29, wherein the compound is administered in an effective amount of about 180 mg per day.
68. (Previously Presented) The method of claim 31, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

Claims 69-70 (Canceled).

71. (Previously Presented) The method of claim 57, wherein the compound is administered in an effective amount of about 180 mg per day.
72. (Previously Presented) The method of claim 60, wherein the compound is administered in an effective amount of about 180 mg per day.

73. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



or a pharmaceutically acceptable salt thereof,

wherein R and R₁ are each independently selected from the group consisting of hydrogen, —COR₂, —COR₃, and R₄,

R₂ is selected from the group consisting of hydrogen, C1-C14 alkyl, C1-C3 chloroalkyl, C1-C3 fluoroalkyl, C5-C7 cycloalkyl, C1-C4 alkoxy, and phenyl,

R₃ is phenyl with at least one substitution selected from the group consisting of C1-C4 alkyl, C1-C4 alkoxy, hydroxy, nitro, chloro, fluoro, trichloromethyl, and trifluoromethyl,

R₄ is selected from the group consisting of C1-C4 alkyl, C5-C7 cycloalkyl, and benzyl, and

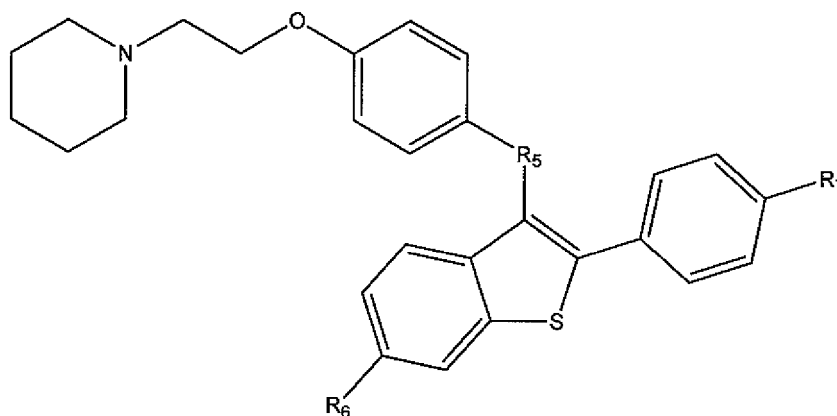
R₅ is selected from the group consisting of oxygen and —C=O; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

74. (Previously Presented) The method of claim 73, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

75. (Currently Amended) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising

administering to the mammal an effective amount of a prodrug having the formula



or a pharmaceutically acceptable salt thereof,

wherein R₅ is selected from the group consisting of oxygen and $-C=O$,

R₆ and R₇ are each independently selected from the group consisting of hydrogen, hydroxy and $-OR_8$,

R₈ is a hydroxy protecting group selected from the group consisting of ether, ester, C1-C4 alkyl, substituted C1-C4 alkoxy, unsubstituted C1-C4 alkoxy, substituted C1-C6 alkyl, unsubstituted C1-C6 alkyl, SO_2 -(C4-C6 alkyl), and $-(CO)Ar$, wherein Ar is a benzyl or a substituted phenyl, and

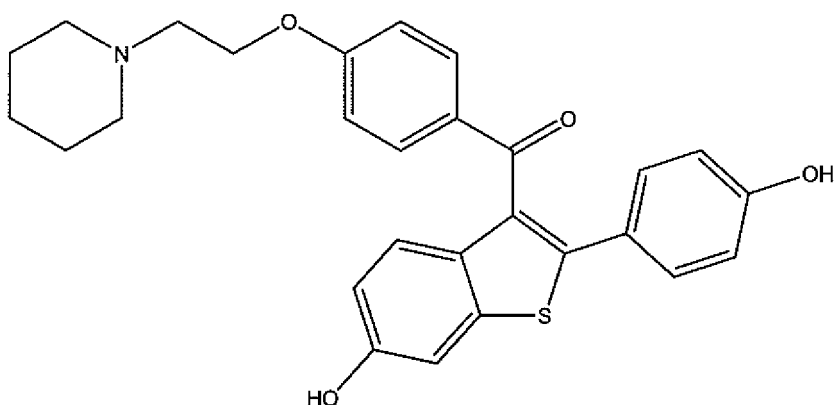
at least one of R₆ and R₇ is metabolically processed by the mammal after administration of the prodrug to convert the prodrug into a pharmaceutical compound effective in the treatment of androgen-independent prostate cancer; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

76. (Previously Presented) The method of claim 75, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

77. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising

administering to the mammal an effective amount of a compound having the formula



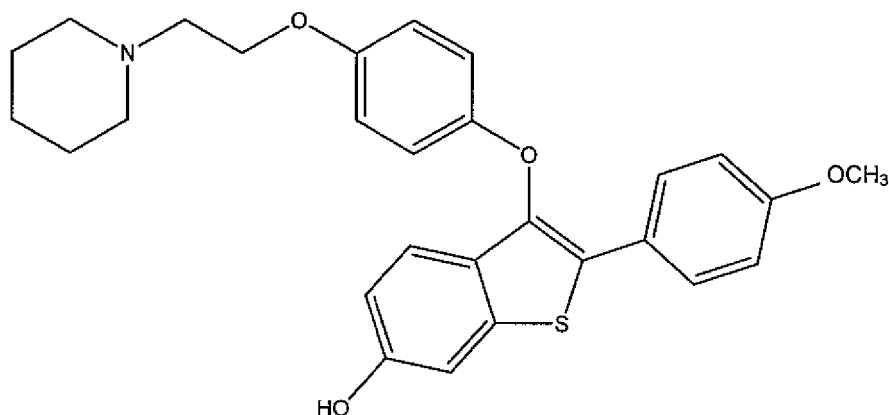
or pharmaceutically acceptable salts thereof; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

78. (Previously Presented) The method of claim 77, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

Claims 79-80 (Canceled).

81. (Previously Presented) A method of inhibiting tumor growth of androgen-independent prostate cancer in a mammal in need thereof, the method comprising administering to the mammal an effective amount of a compound having the formula



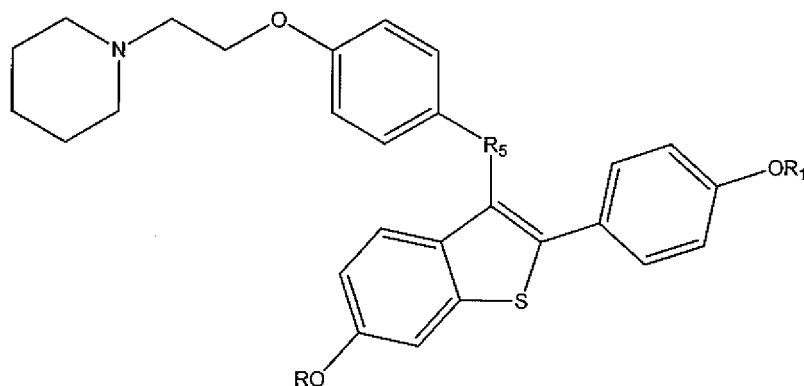
or pharmaceutically acceptable salts thereof; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

82. (Previously Presented) The method of claim 81, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

Claims 83-84 (Canceled).

85. (Previously Presented) A method of stabilizing or reducing tumor mass of androgen-independent prostate cancer in a mammal in need thereof, the method comprising
 administering to the mammal an effective amount of a compound having the formula



or a pharmaceutically acceptable salt thereof,

wherein R and R₁ are each independently selected from the group consisting of hydrogen, —COR₂, —COR₃, and R₄,

R₂ is selected from the group consisting of hydrogen, C1-C14 alkyl, C1-C3 chloroalkyl, C1-C3 fluoroalkyl, C5-C7 cycloalkyl, C1-C4 alkoxy, and phenyl,

R₃ is phenyl with at least one substitution selected from the group consisting of C1-C4 alkyl, C1-C4 alkoxy, hydroxy, nitro, chloro, fluoro, trichloromethyl, and trifluoromethyl,

R₄ is selected from the group consisting of C1-C4 alkyl, C5-C7 cycloalkyl, and benzyl, and

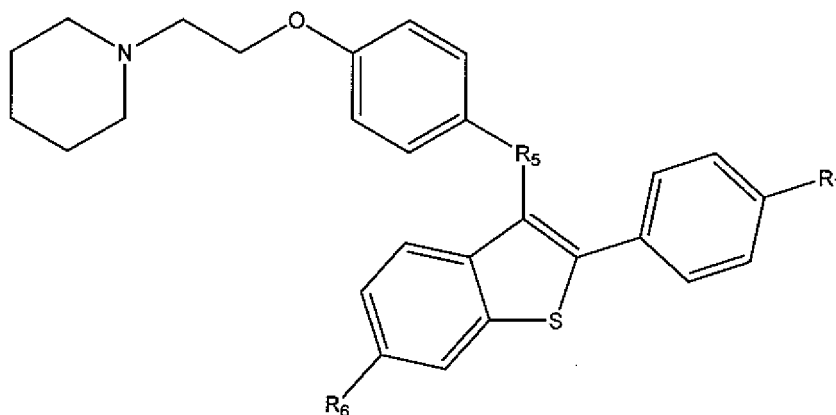
R₅ is selected from the group consisting of oxygen and —C=O; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

86. (Previously Presented) The method of claim 85, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.

87. (Currently Amended) A method of stabilizing or reducing tumor mass of androgen-independent prostate cancer in a mammal in need thereof, the method comprising

administering to the mammal an effective amount of a prodrug having the formula



or a pharmaceutically acceptable salt thereof,

wherein R₅ is selected from the group consisting of oxygen and $-C=O$,

R₆ and R₇ are each independently selected from the group consisting of hydrogen, hydroxy and $-OR_8$,

R₈ is a hydroxy protecting group selected from the group consisting of ether, ester, C1-C4 alkyl, substituted C1-C4 alkoxy, unsubstituted C1-C4 alkoxy, substituted C1-C6 alkyl, unsubstituted C1-C6 alkyl, $SO_2-(C4-C6\text{ alkyl})$, and $-(CO)Ar$, wherein Ar is a benzyl or a substituted phenyl, and

at least one of R₆ and R₇ is metabolically processed by the mammal after administration of the prodrug to convert the prodrug into a pharmaceutical compound effective in the treatment of androgen-independent prostate cancer; and

administering to the mammal an estrogen lowering drug in an amount effective to lower the serum level of estradiol in the mammal.

88. (Previously Presented) The method of claim 87, wherein the estrogen lowering drug is administered in an amount effective to lower the serum level of estradiol in the mammal to an amount no greater than about 30 pg/ml.